5 Empathy Is Not Always as Personal as You May Think: The Use of Stereotypes in Empathic Accuracy

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You never really understand a person until you consider things from his point of view . . . until you climb into his skin and walk around in it.
—Atticus Finch, *To Kill a Mockingbird*

Empathy is one of those ordinary everyday miracles. Although it is impossible to "climb into someone else's skin and walk around in it" as Atticus Finch suggests is necessary to understand another person, we still frequently feel as though we *do* come to understand others' experiences. What makes this possible? How do we mentally walk a mile in another person's shoes? As the opening quote suggests, the idealized view of empathy seems to involve an "empathizer" paying careful, close attention to the specific words and cues of the individual who is the empathizer's target. However, we propose that a substantial part of understanding others comes from within the empathizer's own head, including falling back on very impersonal information such as stereotypes associated with the target person's roles or group memberships. In this chapter we focus on one specific component of empathy, empathic accuracy—that is, people's everyday attempts to accurately understand the specific thoughts and feelings going on in the heads of others. We explore the processes involved in achieving empathic accuracy, and we argue that understanding others is not always as personal as people think.

Top-Down Empathy

Several scholars contrast between two forms of empathy (e.g., Hodges and Wegner 1997; Stueber 2006): a basic form where perceivers (perhaps automatically) detect and decode cues such as facial expressions to understand another's emotions and a more advanced form that requires complex cognitive abilities to understand another's behavior, thought processes, or intentions. Recent research from our lab suggests that these basic and advanced empathic abilities may be separate abilities, orthogonal to one another. Across two studies (Lewis 2008; Locher 2009) participants were given a

simple nonverbal decoding task (the DANVA; Nowicki and Duke 2001) that required them to observe and label facial expressions as happy, sad, angry, or fearful. Participants also completed a more complex empathy task in which they inferred the thoughts and feelings of a target person discussing a personal experience (the standard-stimulus empathic accuracy task; Ickes 1993). For this second task, coders then rated the accuracy of these inferences by comparing them to the thoughts and feelings the target actually reported experiencing. Unexpectedly, the correlation between accuracy for decoding facial expression and accuracy for inferring thoughts and feelings was very low and nonsignificant in both studies.

One explanation for the surprising lack of correlation between these two types of empathy may be that they draw on different skill sets. Whereas basic empathy is a "bottom-up" strategy that requires a perceiver to detect and decode cues that are directly available in an interpersonal situation, advanced empathy may instead rely less on decoding cues in the immediate interaction and more on "top-down" strategies that require the use of mental representations that exist in the perceiver's own mind. In line with such an explanation, of the many strategies people use to solve the "other minds problem" (that is, knowing what is going on in other people's heads), social cognition researchers have identified several that rely on information and ideas that are extraneous to the actual behavior displayed by the target of empathy (for a thorough discussion see Malle and Hodges 2005). For instance, perceivers may project their own mental states onto a target or mentally simulate how a target may think, feel, and behave in a certain situation. What these strategies have in common is that they draw on experiences, knowledge, and stored constructs within the mind of the empathic perceiver. What is more, these strategies include a role for imagination and synthesis rather than relying solely on simple perception.

Myers and Hodges (2009) have gone so far as to suggest that empathic accuracy may actually be more a product of good imagination rather than acute perceiving. They propose that good mind readers construct a mental representation, or schema, of another person and then use this schema to model how that person may think or feel at a specific moment. These schemas are helpful when inferring a person's mental contents because they provide a wider base to draw on than the target's outward behaviors alone. Consistent with the hypothesis that people construct and rely on schemas when empathizing, Stinson and Ickes (1992) found friends were more accurate at inferring one another's thoughts than were strangers. This difference was explained by strangers' relative *in*accuracy for inferring thoughts regarding events unrelated to the immediate context of the experiment. Friends had more experience with one another across time and other situations and were accordingly better able to imagine how their partner would think or feel in different types of contexts.

Likewise, Thomas and Fletcher (2003) found accuracy at inferring a target's thoughts was a stair-step function of intimacy between the target and the perceiver—on average

a target's dating partner was more accurate than a friend, who was in turn more accurate than a stranger. The authors suggested that, due to rich histories and experiences with one another, dating partners had constructed extensive schemas of the target person that informed their inferences. Friends, and especially strangers, had less varied and deep experiences with the target; thus, their schemas of the target person were comparatively impoverished, and they instead had to rely more heavily on behavioral "data" to inform their inferences. Because a person's words and behaviors alone do not provide a direct portal to his or her private thoughts and feelings, accuracy suffered when perceivers had less extensive schemas to use when imagining what the target was thinking.

These two studies provide observational evidence that empathic accuracy increases with intimacy and acquaintanceship, presumably because a perceiver's target-schema becomes more extensive. These types of schemas can be built with knowledge of past interactions and experiences with a person, and they help us to flesh out the contents of a close other's mind. However, what remains unclear is what perceivers do in the absence of this type of personal information gained from acquaintanceship and experience. We must frequently interact with people with whom we are not intimately acquainted and who are not quick to share personal information. How do we attempt to understand their thoughts and feelings? In the absence of the schemas that come along with acquaintanceship and access to personal information, it seems unlikely that we would revert to relying solely on perceptions of a person's immediate behaviors to make judgments about what they are thinking about.

As one answer to this question, Gesn and Ickes (1999) provided experimental evidence that schemas based on something other than extensive experience with another person aid in achieving empathic accuracy—and they further showed that perceivers begin to build these schemas very quickly. In their study, perceivers watched a videotape of a target (who was a stranger to the research participants) discussing a personal problem and saw the tape either in its naturally occurring order or in a mixed-up sequence. The authors posited that participants who saw the target videotape in its original order would be able to build a schema of that target based on what the target shared about his or her experience; however, the ability to construct such a schema would be compromised for perceivers who saw the target videotape in a random order. Their results showed that perceivers in the natural-order condition showed more accuracy than those in the random-order condition but *only* when the target's thoughts to be inferred were consistent with the ongoing dialogue of the interview. In other words, people who viewed the target's interview in the original order were able to construct a schema of that person to draw on when making inferences about the target's thoughts. When those thoughts were schema consistent, accuracy was high; when the thoughts were schema inconsistent, accuracy was low. This pattern was not observed for participants in the random-order condition. Because those participants

saw the target's interview in randomly presented scenes, their ability to collect information and construct a schema of the target was impaired, and they were thus more likely to use behavioral cues over schemas to infer the target's thoughts. Consequently, accuracy for perceivers in the random-order condition did not suffer when the thoughts to be inferred were schema inconsistent.

Thus, the work of Stinson and Ickes (1992) and Thomas and Fletcher (2003) suggests that we naturally accumulate information about the people we have relationships with, and the results from the Gesn and Ickes (1999) study suggest that even when we do not know other people well, we still form expectations about what they are likely to be thinking or feeling. We can expect then, that as time goes by and we gather more and more information about a person, the mental schemas we construct will become richer, providing a basis for more accurately inferring detailed thoughts that would be difficult, if not impossible, to read by simply observing the person's behavior in the immediate situation.

When Stereotypes Help

What other information might perceivers who lack extensive individuated schemas of their targets use to make inferences about that person's thoughts and feelings? We believe that stereotypes serve as an important source of information that perceivers use in such cases. Stereotypes associated with membership in social categories have been suggested as an additional source of information that perceivers use to form broad impressions about others (Brewer 1988; Fiske and Neuberg 1990). Stereotypes get a bad rap as the basis of negative bias in person perception (e.g., Devine 1989), and to the extent that stereotypes lead to prejudice, this reputation is deserved. Furthermore, being on the receiving end of a stereotype can be depersonalizing, even when the stereotype is neutral or positive—and can be devastating when the stereotype is a negative one.

Thus, it may be surprising to suggest that stereotypes play a role in facilitating something associated as much with understanding and caring as empathy. However, stereotypes, like other category generalizations (Macrae, Milne, and Bodenhausen 1994; Fiske and Taylor 2008), come to exist in part because they allow us to make judgments efficiently, which makes them particularly useful when engaging in complex and cognitively demanding tasks such as trying to guess what another person is thinking. Moreover, research suggests that stereotypes can increase the accuracy of social perceptions (for a review see Jussim et al. 2005), particularly when individuating information is unavailable (Kunda and Thagard 1996). Thus, basing mental state inferences on stereotypes (although an imperfect strategy to be sure) may actually buy a perceiver some accuracy in guessing a target's thoughts that would otherwise be hard to come by.

We are unfamiliar with any research specifically examining whether perceivers use stereotypes when inferring a target's ongoing thoughts and feelings over the course of an interaction. However, other social cognition research is suggestive. Ames (2004a, 2004b) has shown that perceivers use stereotypes to infer the intentions and general mental states of an imagined other. Furthermore, Ames found that perceivers used stereotypes more when the target seemed dissimilar to themselves, suggesting that stereotypes were strategically applied to infer mental states when alternate strategies (e.g., projecting one's own mental states onto the target) made less sense.

Similarly, research from the related realm of personality judgments also suggests that stereotypes may play a role in understanding others. Kenny's (2004) theoretical model of interpersonal perception suggests that stereotypes play a role in forming impressions of another person's personality, particularly when acquaintance with that person is low so there is very little other information to go on. Consistent with this model, Biesanz, West, and Millevoi (2007) found that as people became more acquainted with a target, their judgments of that target's personality were less a reflection of stereotype accuracy (e.g., accuracy at judging the average person) and more a reflection of differential accuracy (e.g., accuracy at judging that person specifically). Stated differently, perceivers who were less acquainted with a target and had less individuating information about a target made judgments based more on knowledge about what the average, or stereotypical, person was like. As with Ames's work, the results of Biesanz et al.'s (2007) study suggest that reliance on stereotypes to make personality judgments increased when other strategies were not available.

Other research suggests that increased knowledge about or exposure to a particular stereotype may aid in forming more accurate perceptions of the stereotyped group's attitudes. In a study by Hodges et al. (2010) female perceivers were asked to watch videotapes of new mother targets and guess the targets' general attitudes toward motherhood. Perceivers for whom new motherhood was salient (either because they themselves were also new mothers, or because they were pregnant and about to become new mothers) were more accurate in guessing the targets' attitudes than women who had never been pregnant or raised a child. Specifically, the women for whom new motherhood was salient were more accurate because they were better at stereotype accuracy—guessing the part of a target's attitudes that was generally shared by all new mothers. When it came to differential accuracy—that is, guessing how a specific target's attitudes differed from the prototypical mother, new mothers and pregnant women were no better than never-pregnant nonmothers.

Taken together, we can surmise that when people have individuating information about another person available to them, it allows them to construct and then draw on a personalized schema of the person when inferring that person's thoughts. However, in the absence of this type of personal information gained from acquaintanceship and experience, people may also use stereotypes to inform thought

inferences. Specifically, we hypothesize that when inferring the thoughts of someone with whom a perceiver is not intimately acquainted, perceivers draw on group or role-based stereotypes associated with a target person's social categories, and they are particularly likely to do this when individuating information is unavailable. As evidence of this process, we expect that perceivers would be more accurate at inferring thoughts that were stereotypical of a target's social role, especially when that target did not share much personal information.

In order to empirically investigate the hypothesis that perceivers use stereotypes when inferring the contents of a target's mind, we focused our investigation at the level of each distinct thought instead of considering the specific target person as the lowest unit of analysis. In the past, empathic-accuracy researchers have typically aggregated accuracy across thought inferences within a target to circumvent violations of the assumption of independence required by traditional single-level modeling techniques. However, one downside to collapsing accuracy in this way is that it ignores potentially meaningful variation between the different thoughts that a target individual reports. It seems probable that the thoughts experienced by a target vary across a number of characteristics that may also be related to empathic accuracy, and examination of thought-level variables has gone largely uninvestigated up to this point.

One possible reason that previous researchers have chosen to use the target—not individual thoughts—as the lowest unit of analysis may be the difficulty of modeling nested data structures (in this case, individual thoughts nested within targets) using traditional single-level linear modeling strategies. However, the use of hierarchical linear modeling (HLM) is becoming increasingly more common as an approach for disentangling multilevel effects. Because HLM allows us to simultaneously study thought-level variables, target-level variables, and perceiver-level variables, it is possible to test cross-level interactions (e.g., whether differences in the relationship between lower-level variables and outcomes could be explained by higher-level variables). Specifically, by using HLM we are able to test the hypothesis that the effect of stereotypicality (assessed at the individual thought level) on empathic accuracy depends on how much personal information about the target is available (assessed at the target level).

To test whether perceivers use stereotypes to infer the thoughts of a target particularly when little individuating information is available, we asked a sample of college students ($N = 81$) to watch videos of targets who all belonged to the same social category. Specifically, the targets were all women who had recently given birth to their first child and were videotaped while discussing their experiences of becoming a new mother (see Hodges et al. 2010 for a complete description of the collection of the target videos). Following the Ickes (1993) empathic accuracy paradigm, immediately after the original videos were made each target watched the video of her interview and was asked to report any time she remembered having had a specific thought or feeling. The target's description of the actual content of that thought was recorded as well as the time on the video counter that corresponded to the point in the video at which the target remembered having the thought.

The college student participants served as perceivers and were shown the target videos, which were stopped at the same points corresponding to the times in the video when the target reported experiencing a thought or feeling. The perceivers were asked to infer what the target was thinking at that moment. Independent coders then rated the accuracy of the perceivers' inferences by comparing them to the actual thoughts earlier reported by the targets (steps also consistent with Ickes' paradigm). An average accuracy score was computed for each thought inference for each perceiver, and this score was scaled from 0 to 100 (higher numbers reflected higher ratings of accuracy by the coders).

For our measure of thought stereotypicality, another set of coders were shown the actual thoughts reported by the targets and rated how characteristic they were of what the average new mother would report about her experience. In order to measure the availability of individuating information about a particular target, we showed another set of coders the target videos, and after watching the video in its entirety, they rated overall how personal the information shared by the target was. Thus, stereotypicality was assessed for each reported *thought*, whereas the extent that the target shared personal information in general was assessed one level up, for each *target*.

Using HLM, we modeled accuracy for a specific thought as a product of how stereotypical that thought was and how personal the information shared by the target was. Recall that we predicted that perceivers would rely on new mother stereotypes to infer a target's thoughts, and thus we expected higher accuracy for thoughts with content that was consistent with new mother stereotypes and poorer accuracy for more idiosyncratic thoughts whose contents were inconsistent or irrelevant to the stereotype. In addition we expected that participants would be most likely to rely on stereotypes in the absence of person-specific information. Thus, we predicted that the accuracy boost for stereotypical thoughts would depend on how much personally individuating information the target revealed. Consistent with past empathic accuracy researchers (e.g., Gesn and Ickes, 1999), we also included a rating provided earlier by our coders of how difficult each thought was to infer as a covariate in all our analyses. This was done to ensure that any effect of stereotypicality was not confounded with ease of inference.

Overall, the results confirmed our hypotheses. In support of the idea that stereotypes can contribute to people's accuracy in understanding others' thoughts, perceivers showed greater accuracy for stereotypical thoughts and worse accuracy for less stereotypical thoughts. What is more, the boost in accuracy for stereotypical thoughts was present even when controlling for how difficult a thought was to infer. In other words, perceivers were more accurate at inferring stereotypical thoughts, and this could not be explained by these thoughts simply being easier to infer.

The stereotype-based accuracy boost was present for men and for women. Interestingly, however, we did find a sex difference in the extent to which the stereotypicality effect interacted with the availability of personal information about the target. The three-way interaction is broken down in Figure 5.1. As this graph shows, women were more accurate at judging stereotypical thoughts, but more so when the target revealed

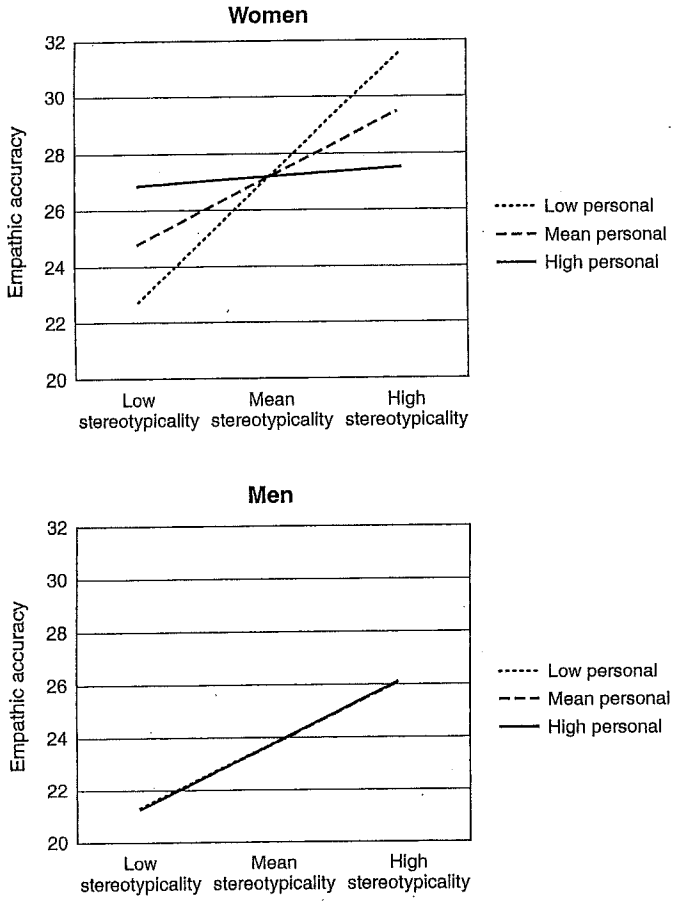

Figure 5.1
Empathic accuracy as a function of thought/feeling stereotypicality and how personal the information revealed by the target was. Low denotes 1 SD below the mean, and high denotes 1 SD above the mean.

little personal information; when a target revealed highly personal information, women's accuracy was similar across all levels of stereotypicality. However, a different pattern was found for men. Across the board men showed higher accuracy for more stereotypical thoughts, regardless of whether or not the target revealed personal information (indeed, the lines for the men's data in figure 5.1 are virtually entirely overlapping!).

In other words, men appear to consistently rely on stereotypes to guess the targets' thoughts, as evidenced by the fact that they had greater accuracy when stereotypes were actually relevant to guessing the target's thoughts. In contrast, women seemed to moderate their use of stereotypes as a strategy for guessing targets' thoughts. Women also relied on stereotypes—but only when a target revealed little personal, individuated information. In this way women's data looked like the extreme version of men's data: much greater accuracy for thoughts that contained more stereotypic content. However, for targets that did share personal, individuated information, women's accuracy depended much less on how stereotypic a specific thought was. It was as if women knew when to pay attention to individuating cues in order to guess a target's thought and when inferring a "one size fits all" thought was their best option. This flexibility in strategies appeared to help women, as women's accuracy was higher than men's overall.

It is interesting to speculate as to why the women were able to switch strategies better than men (as evidenced by the three-way interaction). Notably, we found no two-way interaction of sex and stereotypicality, so being dealt stereotypic thoughts to guess did not generally advantage women over men. Had such a pattern been present in our data, it could possibly be explained by increased familiarity with new-mother stereotypes on the part of women. However, instead, the special sensitivity that women seemed to possess was an awareness that when targets were sharing highly individuated information, it was better to use that information rather than stereotypes to infer what the target was thinking at a particular time.

Biesanz and Human (2010) found that perceivers without an explicit accuracy motivation goal judged others' personality more stereotypically, whereas perceivers with an explicit motivation goal judged others' personality more distinctively, individuating more among targets. Thus, one plausible explanation for our three-way interaction is that, compared to men, women were more motivated to accurately infer thoughts, and this resulted in greater reliance on individuating information when it was available. This interpretation is in line with several past studies finding evidence of subtle motivators that affect women's accuracy more than men's (for a review see Hodges, Laurent, and Lewis 2011).

All told, our results suggest that there may be sex differences in which strategy is employed when guessing another person's thoughts, but overall there was strong support for the idea that all perceivers—men and women—were able to use stereotypes to achieve greater accuracy, as evidenced by the fact that the more stereotypic a target's

thought was, the more accurately a perceiver guessed it. When presented with what has historically been seen as the nearly impossible "other minds" problem of reading another person's thoughts, it seems people make good use of shared content in the form of stereotypes.

Stereotypes are learned, but their content does not always reflect having personally experienced any covariation between category membership and characteristics associated with the stereotype (Hamilton and Gifford 1976). For example, many Americans who have experienced minimal or no interactions with certain ethnic or religious groups can nonetheless rattle off the stereotype for these groups, which are often negative and furthermore, frequently inaccurate. However, in a more positive light, our ability to learn stereotypes without having to observe firsthand instances of covariation creates a vast potential for empathic understanding. We learn from afterschool TV specials that children of divorced parents often feel their parents' split is somehow their fault. We learn from magazine articles that victims of crimes, especially personal assaults, are victimized twice—once by the actual crime and again by the fear and distrust that lingers. We know from interacting with neighbors and co-workers that chemotherapy patients miss their hair and widows and widowers miss their spouses. We can know all these things without directly experiencing them ourselves (see Hodges 2005; Hodges et al. 2010), and we can effectively call on this knowledge—maybe even without consciously bidding it—in our social interactions, creating a depth of understanding well beyond that which could occur simply by trying to read facial expressions of emotion or via sympathetic resonance between motor cortices.

Conclusions

In conclusion, including generalized knowledge such as stereotypes in the big tent that encompasses empathy overall—and among the tools for achieving empathic accuracy more specifically—certainly runs counter to many intuitions about empathy. One of the defining features of a folk concept of empathy may be the near-magical quality of feeling as if we are directly perceiving what is inside another person's head—with no apparent mechanism bridging our two minds. Indeed, even more formal definitions of empathy may relegate understanding based on stereotypic knowledge to be something other than empathy. However, rather than damaging its mystique, we think uncovering the secrets that lead to empathic understanding simply makes it all the more amazing.

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III Evolutionary Roots of Empathy